ERSONALITY PROFILE AND STRESSFUL LIFE EVENTS IN ALCOHOL RELAPSE PATIENTS

- a case control study

Dissertation Submitted to

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BRANCH – XVIII

MADRAS MEDICAL COLLEGE

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MARCH 2010

CERTIFICATE

This is to certify that the dissertation **entitled "PERSONALITY PROFILE AND STRESSFUL LIFE EVENTS IN ALCOHOL RELAPSE PATIENTS"** is the bonafide original work of **Dr.GURUMOORTHY.V** in partial fulfillment of the requirements for **M.D. (Psychiatry) BRANCH–XVIII** Examination of The Tamilnadu Dr. M.G.R. Medical University to be held in March 2010. The period of study was from May 2009 to September 2009.

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DECLARATION

I, **Dr. GURUMOORTHY .V** solemnly declare that the dissertation titled, **"PERSONALITY PROFILE AND STRESSFUL LIFE EVENTS IN ALCOHOL RELAPSE PATIENTS"** is a bonafide work done by me at Madras Medical College during the period 2007-2010 under the guidance and supervision of **Dr. R. SATHIANATHEN, M.D., D.P.M. M.P.H.,** Professor of Psychiatry, Madras Medical College.

The dissertation is submitted to The Tamilnadu, Dr. M.G.R. Medical University, towards partial fulfillment of requirement for the award of **M.D. Degree (BRANCH – XVIII) in Psychiatry.**

Place : Chennai.

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CONTENTS

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ANNEXURE - 3

PRESUMPTIVE STRESSFUL LIFE EVENTS SCALE
(Gurmeet Singh et al. 1984)

Rank	Life events	Mean Stress Score
1.	Death of spouse	95
2.	Extra marital relation of spouse	80
3.	Marital separation / divorce	77
4.	Suspension of dismissal from job	76
5.	Detention in jail of self or close family member	72
6.	Lack of Child	67
7.	Death of close family member	66
8.	Marital conflict	61
9.	Property or crops damaged	61
10.	Death of friend	60
11.	Robbery or theft	59
12.	Excessive alcohol or drug use by family member	58
13.	Conflict with in laws (other than dowry)	57
14.	Broken engagement or love affair	57
15.	Major personal illness or injury	55
16.	Son or daughter leaving home	55
17.	Financial loss or problems	54
18.	Illness of family member	52
19.	Trouble at working with colleagues / superior or subordinates	58
20.	Prophecy of astrologer or palmist etc.	52
21.	Pregnancy of wife (wanted of unwanted)	51
22.	Conflict over dowry (Self or Spouse)	51
23.	Sexual problems	51
24.	Self or family member unemployed	51
25.	Lack of son	51

26.	Large loan	49
27.	Marriage of daughter / dependent sister	49
28.	Minor violation of law	46
29.	Family conflict	47
30.	Break up with friend	47
31.	Major purchase or construction of house	46
32.	Death of pet	51
33.	Failure in examination	43
34.	Appearing for an exam or interview	43
35.	Getting married and engaged	43
36.	Trouble with neighbour	40
37.	Unfulfilled commitments	40
38.	Change of residence	39
39.	Change of residence	37
40.	Outstanding personal achievement	37
41.	Begin or end of schooling	36
42.	Retirement	35
43.	Change in sleep working conditions or transfer	33
44.	Change in sleeping habits	33
45.	Birth of daughter	30
46.	Gain of new family member1	30
47.	Reduction in no of family function	29
48.	Change in social activities	28
49.	Change in eating habits	27
50.	Wife begins or stops work	25
51.	Going on pleasure trip or pilgrimage	20

ANNEXURE - 4

CONSENT FORM

I, the undersigned have been explained the following in the language I understand.

1. I have been explained about the nature and details of the study and I give my full consent to participate in it freely, without any bias or coercion.
2. I understand that the purpose of this study is to find further information regarding the role of personality profile and life stressors in alcohol relapse patients.
3. The finding of this study can be used in a thesis or research paper.
4. Personal information will be kept strictly confidential.

Name and signature of patient

Name and signature of the doctor

Name and sign of witness

ANNEXURE I

PROFORMA

AGE :

Sex	**:**	1) Female	2) Male
Education	**:**	1) Primary	2) Secondary
		3) Higher secondary	4) College
Occupation	**:**	1) Unskilled manual work	2) Skilled
		3) Clerical	4) Academic
		5) Professional	6) Business
Marital Status	**:**	1) Married and living together	
		2) Married and separated	
		3) Divorcee	
Type of family	**:**	1) Joint	2) Nuclear
Religion	**:**	1) Hindu	2) Muslim
		3) Christian	4) Others
Family history of alcohol dependence:		1) Absent	2) Present

ANNEXURE II

16 P.F.

WHAT TO DO : Some tests tell us what you can do best, but this one helps us know you better. Since no two people are the same, there are no right or wrong answers to most of these questions, but only what is true for you.

You have a separate answer sheet. On the ANSWER SHEET, there is a number for each question and by the number there are two little boxes, like this : □ □. Mark your answer for each question by putting an X in one of the boxes to show the side that fits you better, LIKE THIS.

EXAMPLES

1. Would you rather

   Play base ball or go fishing

If you would rather play baseball, mark the first box, the left one, like this ☒□. If you would rather go fishing, mark the second box, the right - hand one, like this :□☒.

Inside there are more questions like these. When you are told to, start with number I and answer the questions. Keep these three things in mind :

1) Give only true answers about yourself. It will help you more to say what you really think.

2) You may have as much time as you need, but go fairly fast. Give the first answer that comes to you and do not spend to much time on any questions.

3) Do not skip any questions. Answer every question one way or the other.

1.	Would you rather help children play Games	Or	help fix watches
2.	Is ½ of 7 closer to 3	Or	closer to 5
3.	Do you always feel like doing what you planned	Or	do you every time plan things and then not feel like doing them.
4.	Is it fun to tell an obvious lie with a straight face	Or	could you never do that
5.	Do you like to tell jokes	Or	do you not like to do that
6.	Are you a strict person who does everything as well as possible	Or	do you do some things just we well enough to get by
7.	Do you show up well in social things	Or	would you rather stay quietly out of the way.
8.	Would you rather be an artist	Or	A mechanic
9.	Do you make smart remarks that hurt people's feelings when they deserve it	Or	Do you never do that
10.	If you were good at both would rather bowl.	Or	play chess
11.	After a busy day do you fall asleep easily.	Or	Do ideas keep running through your mind.
12.	Do you have times when you feel sorry for yourself.	Or	Does that never happen to you.
13.	If you had a lot of money to give away would you give it to science research	Or	Would you give it to a church
14.	When you are on a train or bus would you rather look out of the window	Or	Talk to people
15.	If a man wears a beard and dresses	Or	Might he be nice to know

	sloppily would you stay away from him		
16.	When someone is bad tempered to ward you, do you get over it quickly	Or	Does it bother you for some time
17.	In an office would you rather see people	Or	Draw house plans
18.	After 3,5,7,9 does 11 come next	Or	Does 10 come next.
19.	When people don't listen to you do impatient	Or	Does it not bother you do you get
20.	Most of the time would you rather "play it safe"	Or	Take a chance
21.	Would you rather spend an evening quietly at home	Or	At a lively party quietly at home
22.	Do you avoid saying things that bother people	Or	Do you sometimes like to
23.	Are you the one who gets the party going	Or	Do you wait for someone else to
24.	Are you always glad to fix mechanical things	Or	Would you rather sit around and talk
25.	Do you think that most people tell the truth even if it might hurt them	Or	Do they tell the truth only when it won't hurt them.
26.	When there is hard work to do, do you try to take rest & breaks more than most people.	Or	Less than most people
27.	Can you stand things to be all mixed up	Or	Does it bother you
28.	Do you ever feel that there is danger without any god reason	Or	Do you never feel that way
29.	Would it be better if everyone went to church regularly	Or	Is that not too important.

30.	Do you like to take an active part in social things and committee work	Or	Are you most interested in things that you can do by yourself.
31.	Do your friends sometimes think your kind is not on what you are doing	Or	Do they never think that
32.	Are you almost never jealous	Or	are you often jealous
33.	Does it bother you to be the center of interest in a group of people	Or	do you like it
34.	If John is taller than Bill and Mike is shorter than Bill, is Bill the tallest	Or	Is John the tallest
35.	Do people misunderstand you when you mean well	Or	Does that never happen
36.	Do you sometimes speak angrily to parents	Or	Is it wrong to do that your
37.	Do you like things to be quiet	Or	Do you always like exciting things
38.	Do you think people need to observe the rules more strictly	Or	That they need to have greater freedom
39.	Do you feel shy in front of people when you need to talk	Or	can you usually stand right up and talk
40.	Would you rather be a good musician	Or	A good soldier
41.	When people are unreasonable do you keep quiet	Or	Do you feel a strong dislike for them
42.	Would you rather be a book keeper	Or	An artist
43.	Does it bother you if people think you are odd or strange	Or	Does it not bother you at all
44.	Even in the middle of a group of people do you sometimes feel	Or	Do you almost always feel good

	lonely and worthless		
45.	Do we need more attention to old well- tried ideas about social matters	Or	More calm thinking of a new kind
46.	Are you always glad to get together with a group of people	Or	Would you rather do things your own way when you want do
47.	Do you often jump into things too fast	Or	Do you take your time
48.	Do you get very sad about little things	Or	Is that never a problem for you
49.	Would you rather take care of trees in a forest	Or	Teach children in a school
50.	Does little mean the same as thin	Or	The same as small
51.	Do you often get angry with people too quickly	Or	Are you slow to get angry.
52.	Would you rather do without something than put a waiter to a lot of extra trouble	Or	Do you feel that extra trouble is part of his job.
53.	Do you like to be serious most of the time.	Or	Are you happy and laughing most of the time.
54.	Do you just ignore messy streets	Or	Do they bother you
55.	Would you rather have a job where you work by yourself	Or	A job where you had to go to one meeting after another.
56.	Would you rather be a school teacher	Or	A greater hunter
57.	When a person is not doing the right thing do you show him up even if it takes some troubles	Or	Do you just let it go
58.	Would you rather hire workers to fix machines	Or	Fix the machines when they break down
59.	Should we live more by the rules	Or	By our own ideas

	of the group		
60.	Are you afraid of something for no particular reason	Or	Do you never feel that way
61.	Do you think that new ideas make old-time preachers look silly	Or	Are the new ideas silly.
62.	Should you rather spend a holiday in a quiet place	Or	In a resort
63.	Is it all right to leave beds unmade for a day or two	Or	Do they need to be made every day.
64.	Do you have drams that disturb your sleep	Or	Do you not dream very much
65.	Would you rather have a house alone in the deep woods	Or	Where lots of people live
66.	After 2,4,6,8 does 10 come nest	Or	Does 9 come next
67.	Do little things get on your nerves a lot	Or	Are little things not important
68.	Do you sometimes say things that hurt people's feelings	Or	Do you try very hard never to do that
69.	Do you like to make people laugh with funny stories	Or	Do you not like to do that
70.	Is it very important to follow all rules	Or	Are there some rules you should not follow.
71.	Is it easy to go up and meet an important person	Or	Would you rather not
72.	In a play would you rather be a jet pilot	Or	A famous writer
73.	When someone is unreasonable and narrow minded, are you still polite	Or	Do you show him up.
74.	Can people change your mind by appeals to your feelings	Or	Do your feelings not have anything much to do with

			what you think.
75.	When someone corrects you or blames you for something do you try to show you are right	Or	Do you accept the blame
76.	Would you rather be the one in charge of a group of people	Or	Just be one of the group
77.	Do you like thinking games better	Or	Do you like sports better
78.	Can you spend a whole morning without wanting to speak to anybody	Or	Would you never feel like that
79.	Are you a practical person	Or	More of a dreamer
80.	Do you feel comfortable and calm	Or	Are you often upset
81.	Would you rather reach children about their own feelings	Or	Build a new building.
82.	After N,P,R,T,V does X come next	Or	Does W come next
83.	Do your feeling usual come from what is going on around you	Or	Do you get strong feelings that come without any real cause.
84.	If you have to tell someone a lie do you have to look away	Or	Can you look at him.
85.	Do you really enjoy all large groups of people such as parties or dances	Or	Would you rather be alone much of the time.
86.	Do you usually do what you want to do.	Or	What will be best for other people.
87.	When you join a new group does it take some time to fit in	Or	Do you fit in right away.
88.	Would you rather have a job writing children's books	Or	Fixing electrical machines.
89.	Do you think that most people are honest only because they are afraid of getting caught	Or	That most people would be honest anyway.

90.	Can you take either side in an argument just to be sure that all sides are thought about	Or	Would you not want to take the side you didn't believe in
91.	Are you always careful to believe only half of what you read	Or	Can you depend upon the things you read
92.	When someone fusses at you in public does it not bother you to much	Or	Do you get very embarrassed and upset
93.	Do you think we need stricter laws about Sunday	Or	More freedom to do what we like
94.	Would you rather paint pictures	Or	Run a social club
95.	Do you like to make plans so that you will not waste time between jobs	Or	Do you take things as they come
96.	Do you have many problems	Or	Are you getting along well
97.	Do people say you talk too much or are y	Or	Are you quiet
98.	After 3,6,12,24 does 36 come next	Or	Does 48 come next.
99.	When you get upset do you cool down again very quickly	Or	Does it take a while to calm down
100.	In a strange city would you stay away from the parts of town that people say are dangerous	Or	Would you walk any place you wanted
101.	Do people say that you are a serious person	Or	That you are happy go lucky.
102.	Do you feel that some jobs do not need doing so well as others	Or	That any job should be done as well as you can.
103.	Do you find it hard to speak to a large group of people	Or	Do you like it
104.	Would you rather read about battles and war	Or	About people's feelings
105.	If someone gets mad and yells at	Or	Do you yell back

	you, do you stay quiet and calm		
106.	Do you like to tackle problems that other people have made a mess off	Or	Would you rather start from the beginning
107.	Do you think we should be very slow to lose the wisdom of the past	Or	Should we move faster to try new things.
108.	Do your friends think you have many new ideas	Or	That you are good at following the ideas of others.
109.	If you had more money than you need, would you keep it in case you need it later.	Or	Would you give some to a church.
110.	Would you rather work with a committee	Or	One your own
111.	Are you a person who gets things done	Or	A dreamer
112.	When you are going to catch a train or a bus do you get tense and nervous	Or	Do you feel you have enough time
113.	In your spare time would you rather join a hiking club	Or	A club that helps people
114.	Is *red* more like *blue*	Or	More like *orange*
115.	Do you always have lots of energy when you need it	Or	Do you often feel too tired
116.	Are you critical of other people's work	Or	Are you not like that
117.	Do people say you are lively	Or	Do they say you are quiet
118.	Do you think that most people take life too seriously	Or	Not seriously enough
119.	Do you speak you mind no matter how many people are around	Or	Do you hold back when a lot of people are around.
120.	Would you rather fix machines that don't work	Or	Think about what life means.

121.	If a neighbour cheats you in some small thing, would you rather show him up.	Or	Just let it go
122.	Would you like to be a writer about music and pays	Or	Would you not like that kind of work.
123.	Would you rather ride in a car with someone else driving	Or	Do you like to drive a car
124.	When the teacher calls your name are you glad to show what you can do	Or	Are you afraid you have done some thing wrong.
125.	Do you think our country should keep its army strong.	Or	That we should depend on good will among all countries.
126.	Do you like to be active in social things	Or	Would you rather be alone
127.	If someone gets mad at you would get upset too	Or	Would you try to calm him down
128.	Do you usually feel good no matter how many troubles there are	Or	Do you get to feeling low

INTRODUCTION

Alcohol dependence is characterised by craving, compulsion, primacy of drinking over other activities and a state of neuronal adaptation leading to physical and mental disturbances on withdrawal. One of the most important problems in recovery from alcohol and substance abuse is relapse. Clinicians must always realize and be aware that relapse is a distinct possibility which can happen to anyone who is and has been dependent on alcohol. About 70 to 90% of clients with alcohol dependence relapse within three months. (Mc Lellan et al., 2000).

Relapse can be better understood as resulting from an interaction of client-,family-,social-, and treatment related factors. Researches into the causes of relapse led to classifying relapse determinants into two broad categories- intrapersonal and interpersonal determinants. Personality traits are an important intrapersonal determinant of relapse (Sandahl C, 1984).

PERSONALITY AND ALCOHOL RELAPSE

Allport defined personality as "the dynamic organization within the individual of those psychosocial systems that determine his unique adjustment to his environment".

Since long it has been hypothesized that personality bears a two way relationship with relapse. This relationship has been a topic of continuing debate and has led to varied and inconclusive results.

Theories favouring the existence of a separate 'alcoholic personality' have not stood the test of time. However persons with certain personality traits are more prone for relapse. Neuroticism, novelty seeking, low ego strength and high ergic tension are the variables commonly associated with alcohol relapse when compared with abstaining individuals albeit inconsistently.

Adherence to psychosocial interventions, coping skills, attitude towards recovery and self perception of the ability to withstand stress are important variables which depend heavily on personality traits of the individuals.

Relapse prevention and its treatment form an integral part of management of alcohol dependence as relapse is a part of the chronic course of the illness. Relapse prevention strategies incorporate various psycho social interventions and specific coping skills training in the treatment modality.

STRESSFUL LIFE EVENTS AND ALCOHOL RELAPSE

Stress is considered a major contributor to the continuation of alcohol use as well as relapse. The notion that stressful life events can cause susceptible people to relapse to alcohol use has an intuitive appeal. Many studies that have determined an association between substance use and stress have been unable to establish a causal relationship between the two. While theoretical and methodological ambiguities have resulted in inconsistent empirical support of the relationship between personally experienced stress and return to drinking (Allan and Cooke, 1985; Hall et al., 1990), findings indicate that personally threatening and chronic life stressors elevate the risk for relapse (Brown et al., 1990).

Studies are inconsistent regarding the ‘tension reduction hypothesis’ which posits that people use and relapse to alcohol in order to reduce stress. However alcohol dependent individuals frequently experience stress related to occupational, legal, social and financial problems and negative events in their life predicted relapse to alcohol use more than positive life events. Hence the study of interactions between stressful life events and alcohol relapse has widespread implications for both assessment and treatment of the patients.

REVIEW OF LITERATURE

ALCOHOL RELAPSE

Relapse literally means 'to go back into a previous condition or into a worse state after making improvement", or "to regress after partial recovery from illness" (Oxford medical dictionary).

Studies differ widely in the definition of relapse and duration of abstinence before relapse. In some studies it refers to the initial episode of alcohol use following a period of abstinence (Marlatt GA, 1978). According to Marlatt et al. (1985), relapse refers to failure to maintain behaviour change over time.

Daley et al. (2003), state that relapse can be viewed not only as the event of resumption of a pattern of substance abuse or dependency, but also as a process in which indicators or warning signs appear prior to the individual's actual substance use.

Armor et al. (1978), states that a relapsed patient is a person who was diagnosed of alcohol dependence syndrome according to the ICD 10 criteria and stopped using alcohol at least for a month but subsequently started using alcohol. Polich et al.(1981), propounded the following components associated with relapse as reversal to pathological pattern of drinking characterized by 'craving' and 'loss of control', severity of drinking problems

in terms of withdrawal and associated problems, repeated admissions during the follow-up period and gross impairment in social and occupational spheres.

DSM IV TR states four remission specifiers for substance dependence based on the interval of time that has elapsed since the cessation of dependence (early vs sustained remission) and whether there is continued presence of one or more criteria for dependence or abuse (partial vs full remission). Accordingly if after a period of remission or recovery, the individual again becomes dependent, the application of early remission specifier requires that there again be at least one month in which no criteria for dependence or abuse are met.

DETERMINANTS OF RELAPSE

Research by Marlatt et al.(1985), led to classifying relapse into two broad categories, intrapersonal and interpersonal determinants. Intrapersonal determinants contributing to relapse include negative emotional states, negative physical states and positive emotional states, testing of personal control and urges and temptations.

Interpersonal precipitants of relapse include relationship conflicts, social pressure and positive emotional states associated with certain interactions with others.

Catalano et al.(1985), in a review of rates and determinants of relapse looked into the strength of evidence for factors associated with relapse to

alcohol use. Factors strongly associated with relapse were lack of family and peer support and negative life events.

Gorski et al.(1979), classified recovering alcoholics into three groups- recovery prone, transitionally relapse prone and relapse prone. The relapse prone group was noted to have deviant personality traits compared to the other two groups**.**

PERSONALITY THEORIES

Many forms of personality constructs, investigative methods and epistemic perspectives have been used to sharpen knowledge about personality and alcoholism. In the investigation of personality and alcoholism, a question that has stayed with the science from early on, is uncovering the personality characteristics of the alcoholic (Sutherland, Schroeder & Tordella, 1950). Currently, these investigations have moved from attempts to find a definitive 'alcoholic character' to looking at which personality traits seem to be more pronounced in samples of individuals with alcoholism when compared to established norms (Barnes, 2000). The idea of a singular alcoholic personality has long been considered debunked.

Personality trait theories maintain that though all persons who misuse alcohol need not have the same characteristics, in the pre alcoholic stage, a personality pattern or a constellation of traits should be discernible and correlate with the predisposition towards alcohol dependence.

Mac Andrew (1981), investigated male alcoholics and found that they had an assertive, aggressive, pleasure seeking character which makes them resemble criminals.

Results from prospective studies of the prealcoholic personality consistently show the predictive importance of traits relating to impulsivity, sensation seeking, and emotional distress (Barnes, 2000; Shedler & Block, 1990). Personality traits particularly related to neuroticism appear as direct predictors of the development of harmful drinking behavior in adolescents (Scheier, 1997).

Mudler (2002), in a review about personality and alcohol has suggested that two broad bands of personality, impulsivty/novelty seeking and neuroticism/negative emotionality are associated with alcoholism. Negative emotionality seems to be less important and may largely be a consequence of alcoholism itself.

Grucza et al. (2006), concluded that novelty seeking (NS) and familial risk interact so that the risk associated with high novelty seeking is magnified in families with parental alcohol dependence and novelty seeking is a moderator of family risk. Accordingly high novelty seeking is strongly associated with alcohol dependence in subjects with a parental history of alcohol dependence, but low novelty seeking may protect against the risk associated with familial alcoholism.

A recent review has also confirmed the influence of traits related to impulsivity and sensation seeking, as well as discussing some evidence for grounding these pre alcoholic traits in genetic interactions (Schuckit, 2009).

Regarding alcohol use in adolescents, Zuckermann (1983), proposed the sensation seeking theory. Khanzitian(1985), espoused the self medication hypothesis emphasizing the role of alcohol in regulating unpleasant affects. In alcoholism, many authors have evaluated the dynamics of the locus of control (Rotter, 1966). A belief in internal control would be indicative of an individual who perceives events as a consequence of his or her own behaviour. By contrast externally oriented individuals perceive events as not being contingent upon personal actions, but rather influenced by luck, chance or some other power.

TYPOLOGIES IN ALCOHOL DEPENDENCE

Various typologies, some formal and others less formal, have been proposed during the past 50 years. Early typologies relied more on theoretically framed, clinical observations. More recently, data-driven, multivariate sub classifications have been derived that have etiological significance and predictive validity and may have clinical utility.

One of the first and most well known was Jellinek's typology consisting of five subspecies of alcoholism simply labeled using the first five letters of the Greek alphabet: alpha, beta, delta, gamma, epsilon (Jellinek. 1960).

During the past 25 years, multivariate typologies have been investigated with the use of more complex data extraction methods (e.g., cluster and factor analysis). Cloninger's Type I or Type II and Babor's Type A or B were the first of these. Cloninger and colleagues (1981), identified two separate forms of alcoholism based on differences in alcohol-related symptoms, patterns of transmission, and personality characteristics using data derived from a cross-fostering study of Swedish adoptees. Type I was characterized by either mild or severe alcohol use in the probands and no criminality in the fathers. These Type I alcoholics came from relatively high socioeconomic backgrounds and were frequently associated with maternal alcohol use. Type I alcoholics are thought to be more responsive to environmental influence, to have relatively mild alcohol-related problems, and to have a late age of onset (older than 25 years). On the other hand, Cloninger's Type II alcoholism is characterized as being associated with a family history, having severe alcohol problems, having other drug use, and having an early onset (before age 25).

Significant relationships between this typology and treatment outcomes have been found. For example, Von Knorring (1987), found that type I alcoholics were more significantly recovered than the type II alcoholics.

A second typology was proposed by Babor and colleagues based on a sample of 321 alcoholic inpatients. Babor's Type A resembled Cloninger's Type I, and was characterized by a later age of onset, fewer childhood behavior problems and less psychopathology. Type B resembled Type II alcoholism and

was defined by a high prevalence of childhood behavior problems, familial alcoholism, early onset of alcohol problems, more psychopathology, more life stress and a more chronic treatment history (Babor et al. 1992).

Later studies examining typologies have found more than two subtypes that have clinical and etiological significance, particularly regarding gender, and internalizing/externalizing disorders, in addition to family history and age of onset. For example, several multivariate, multidimensional analyses have revealed that there may be as many as four general, homogeneous subtypes of alcohol dependence: chronic/severe, depressed/anxious, mildly affected, and antisocial. These four subtypes of alcohol dependence are found within both genders and across different ethnic subgroups, but more prospective research is needed to examine their relative clinical course and responsiveness to various pharmacological and psychosocial interventions.

Research about alcoholism typologies can compliment alcoholism-personality research by giving layer of understanding to the results of the current study and other studies dealing with personality traits. For example, different personality traits may be related to different typologies.

PERSONALITY DISORDERS ASSOCIATED WITH ALCOHOL DEPENDENCE

The prevalence of personality disorders in alcoholics varies between 11% and 78% (Nace et al.1991). Antisocial personality disorder is a very common co morbid psychopathology among alcoholics (Hesselbrock et al.

1985; Rounsaville et al. 1987). Antisocial, borderline, avoidant, obsessive compulsive and schizotypal are the specific personality disorders commonly seen in association with alcoholism.

PERSONALITY AND ALCOHOL RELAPSE

Listed on the many predictors of whether or not alcohol relapse will occur are personality profile, life events, mood states, existence of self efficacy, coping behaviours, social support resources and intention to avoid high risk situations (Cummings et al. 1980; Jones and McMahon, 1994; Miller et al. 1996; Isenhart, 1997). Among the variables, personality receives attention, as it relates to the prognosis of alcohol dependence.

Rounsaville et al. (1987), in his study on alcohol relapse concludes that though all personality disorders have been linked to poor treatment outcome in alcoholics, antisocial personality disorder is especially a strong predictor of early relapse and poor outcome.

Studies by Huber and Danahy (1975), and Shepard et al. (1988), failed to identify personality predictors of relapse. However Canton et al. (1988) & Tarnai and Young (1983), found that being introverted and having an external locus of control generally predicted relapse and poor prognosis.

Sellman et al. (1997), explored the relationship between the components of Cloninger's tridimensional model of temperament using the tridimensional personality questionnaire (TPQ), which measures the three personality

dimensions: novelty seeking, harm avoidance (HA), and reward dependence to study relapse in alcohol abusing men. Significantly none of the expected factors of the cluster B personality category or the novelty seeking factor of the TPQ were different in those who relapsed. When compared with those who did not relapse after 6 months of treatment, subjects who relapsed had lower TPQ persistence scale scores and lower obsessional scores.

Works by Janowsky et al. (1999), on alcohol relapse patients showed increased TPQ novelty seeking scores. Low TPQ persistence scales were related to short term relapse. Likewise high harm avoidance, shyness with strangers and fear of uncertainty subscales were associated with relapse.

Litman, Eiser, Rawson, and Oppenheim (1977), conceptualized what they term the "interactional" approach to understanding relapse. Relapse is a complex process that is a result of the interaction between situations that are perceived by the alcoholic as high-risk, the availability of coping strategies to deal with these situations, and the individual's perception (outcome expectancy) that these behaviors will assist in effectively responding to the situation. Hence, the likelihood of relapse is greater in situations where the individual feels helpless to cope. This model possesses many features of the learned helplessness paradigm proposed by Abramson, Seligman, and Teasdale (1978). Sanchez-Craig and Walker (1982), formulated a theory of relapse that focuses on cognitive appraisal and has led to the development of reappraisal therapy.

They suggest that it is the alcoholic's interpretation of events that is all important rather than the situations themselves.

Predicting relapse to substance abuse as a function of personality dimensions was studied by Fisher et al.(1998), among 108 alcohol dependent patients under treatment using NEO-five personality inventory. Findings showed that the substance abuse patients scored higher than the NEO-Personality Inventory normative sample on the personality domains of Neuroticism and Conscientiousness. Survival analysis showed that neuroticism and conscientiousness from the NEO-personality inventory were significant predictors of relapse. Odds ratios showed that the risk of relapsing was greatest for those patients who were both low in conscientiousness and high in neuroticism.

Another concept brought forward in alcohol relapse is the self care deficit (Khantizian EJ & Mac JE 1983) implying an inability for alcoholics to anticipate and avoid harm. The sense of personal weakness and failure generated by a single drink, following abstinence attempts (abstinence violation effect) is one of the considered perspectives of relapse (Marlett GA, 1985).

Kurt Meszaros et al. (1995), administered the Tridimensional Personality Questionnaire to 521 detoxified alcohol-dependent patients. Logistic regression analysis showed that novelty seeking is a strong predictor for relapse in detoxified male patients, but not in females. In both sexes, harm

avoidance and reward dependence were of no predictive value. However, a trend for significance of harm avoidance for predicting "early" relapse (4 weeks) in females was found.

Muller et al. (2008), attempted to identify personality traits that may predict treatment outcome in 146 alcohol dependent patients using NEO-five factor inventory. The study identified psychoticism and persistence as the two most relevant discriminatory parameters. In addition, the risk of relapse was higher in patients with a substantial score in psychoticism and a low score in persistence. When comparing relapsed and abstinent patients, further variables, such as scores for novelty seeking and impulsiveness showed significance. This analysis demonstrated that specific personality characteristics, namely psychoticism and persistence, are usable predictors for the risk of relapse in alcohol-dependent patients.

Christina Delos Reyes et al. (2009), examined the interaction between stressful life events, personality disorder subtype and alcohol use relapse among individuals enrolled in the Collaborative Longitudinal Personality Disorders Study. Individuals with antisocial personality disorder (ASPD) were found to be twice as likely to relapse in response to life stressors compared to individuals with obsessive compulsive personality disorder (OCPD), who were half as likely to relapse in response to life stressors. Further analysis revealed that individuals with OCPD and a negative history of an alcohol use disorder were almost 10 times more likely to relapse in the face of a stressor, while

those with ASPD and a history of an alcohol use disorder were six times more likely to relapse in response to a stressful financial event.

Marcin Wojnar et al. (2007), in a review article on alcohol and drug use reported that negative mood states, impulsiveness and other personality traits, self-efficacy, limited skills to cope with high-risk events and neuro cognitive abnormalities, predicted relapse. Among personality disorders, borderline, avoidant and antisocial personality disorders are the most strongly associated with the risk for relapse in alcohol dependence.

16 PF IN ALCOHOL RELAPSE

Kiran et a. (1984), studied the personality characteristics of alcoholics dropping out of treatment. On the 16 PF questionnaire, although the dropouts differed significantly from the completers on 4 factors (D, I, M, Q) with regard to their mean scores, in terms of the profile interpretation they differed significantly only on factor Q1. The dropouts appeared to be less symptomatic more skeptical and intolerant of inconvenience and change as compared to the completers.

STRESS AND ALCOHOL RELAPSE

The term "stress" often is used to describe the subjective feeling of pressure or tension. Studies indicate that people drink as a means of coping with economic stress, job stress, and marital problems, often in the absence of social support and that, the more severe and chronic the stressor, the greater the

alcohol consumption (Sadava, S.W et al. 1993; Volpicelli, J.R.1987). However, whether an individual will drink in response to stress appears to depend on many factors, including possible genetic determinants of drinking in response to stress, an individual's usual drinking behavior, one's expectations regarding the effect of alcohol on stress, the intensity and type of stressor, the individual's sense of control over the stressor, the range of one's responses to cope with the perceived stress, and the availability of social support to buffer the effects of stress(Pohorecky, L.A., 1991; Jennison, K.M.1992).

Stress and the body's response to it most likely play a role in the vulnerability to initial alcohol use, initiation of alcohol abuse treatment, and relapse in recovering alcohol users. This relationship probably is mediated, at least in part, by common neurochemical systems, such as the serotonin, dopamine and opiate peptide systems, as well as the hypothalamic-pituitary-adrenal (HPA) axis (Kathleen et al. 1999).

Numerous clinical studies have demonstrated a relationship between psychosocial stress and alcohol relapse (Billing and Moos, 1983; Cooper et al., 1992; Hore, 1971; Miller et al., 1983; Rosenberg, 1983). Various hypotheses describe stressors as cues that elicit anticipatory alcohol or drug use responses (i.e., cue reactivity), as stimuli that evoke negative affective states and prompt alcohol use to alleviate this emotional distress (Marlatt and Gordon, 1985), or as events that place adaptational demands on an individual (Cooper et al. 1992; Crutchfield and Grove, 1984). Brown and associates (1995),

demonstrated that stress that taxes adaptational capacity increases risk for addiction relapse and hypothesized that use of an addictive substance is mediated by the expectation that the substance will alleviate the distress.

Susan R. Tate et al. (2006), evaluated additive and interactive models of the effects of acute stressful life events, chronic life stressors, and immediate substance availability on substance use following alcohol and drug treatment One hundred and two subjects meeting DSM-IV criteria for alcohol dependence at treatment entry completed quarterly interviews for one year. He found that severe chronic stressors and substance availability predicted an increased risk of initiating substance use post treatment. In contrast to chronic stressors, recent stressful life events were not predictive of post treatment substance initiation or severity.

In an alcohol dependent individual, a clear connection between stress and relapse has been established. Among abstinent alcoholics, personally threatening, severe, and chronic life stressors may lead to alcohol relapse. Brown and colleagues (1995), studied a group of men who completed inpatient alcoholism treatment and later experienced severe and prolonged psychosocial stress prior to and independent of any alcohol use. The researchers found that subjects who relapsed experienced twice as much severe and prolonged stress before their return to drinking compared to those who remained abstinent. In this study, severe psychosocial stress was related to relapse in alcoholic males who expected alcohol to reduce their stress. Those most vulnerable to stress-

related relapse scored low on measures of coping skills, self-efficacy, and social support. Stress-related relapse was greatest among those who had less confidence in their ability to resist drinking and among those who relied on drinkers for social support. Although many factors can influence a return to drinking, Brown and colleagues (2000) noted that stress may exert its greatest influence on the initial consumption of alcohol after a period of abstinence.

AIM OF THE STUDY

1. To study the pattern of personality profile distribution in alcohol relapse patients.

2. To compare these personality traits with that of control group of abstaining alcohol dependent individuals.

3. To evaluate whether certain personality traits occur more frequently in alcohol relapse patients.

4. To investigate the role of stressful life events in alcohol relapse patients.

NULL HYPOTHESES

1. There is no significant difference in the socio demographic profile between alcohol relapse patients and controls.

2. There is no significant difference in personality profile between alcohol relapse patients and controls.

3. There is no significant difference in the role of stressful life events between alcohol relapse patients and controls.

4. Family history of alcohol dependence is not associated with alcohol relapse.

METHODOLOGY

DESIGN OF THE STUDY

Cross sectional hospital based Case Control study.

SETTING

The study was conducted over a period of five months from May 2009 to September 2009 in the deaddiction clinic and deaddiction ward of Institute of Mental Health, Chennai.

SUBJECTS

The subjects of this study were patients on treatment for alcohol dependence at the Institute of Mental Health and meeting Inclusion or Exclusion criteria.

CASES

INCLUSION CRITERIA

1. Consecutive patients relapsing to alcohol dependence after a period of minimum one month of abstinence.

2. Age:20 -60 years

EXCLUSION CRITERIA

1. Other axis one disorders
2. Concomitant substance abuse other than alcohol
3. Comorbid medical complications

CONTROL GROUP

INCLUSION CRITERIA

1. Alcohol dependent patients who did not relapse and were coming for regular follow up. They were matched with cases with regard to time to relapse.

2. Age: 20-60 years

EXCLUSION CRITERIA

1. Other axis one disorders
2. Concomitant substance abuse other than alcohol
3. Comorbid medical complications

DEFINITION OF RELAPSE

In this study, relapse is defined as a condition in which a previously alcohol dependent individual on treatment, reverts back to dependence pattern after a minimum one month period of abstinence.

This is based on DSM IV TR course specifier for substance dependence which specifies that there should be a period of at least one month of abstinence during which no criteria for dependence or abuse are met for application of early remission specifier.

METHODOLOGY

The study was discussed and approved by the Ethics Committee of the research panel of the Institute of Mental Health, Chennai.

The cases were selected from a screened sample of 50 consecutive patients who relapsed after a period of minimum one month of abstinence. The diagnosis was made after screening with AUDIT questionnaire and using ICD 10 criteria for alcohol dependence. The diagnosis was made by the medical officer in charge and confirmed by a consultant after carefully ruling out psychotic disorders. Informed consent was obtained from all the patients. Of the 50 patients 8 expressed unwillingness to participate, 7 had medical complications and 5 had psychotic features and hence they were excluded. Finally a sample of 30 patients constituted the study group. They were assessed using routine blood investigations and liver function tests.

The control group was patients diagnosed as alcohol dependence coming for regular follow up at the deaddiction clinic. They were under standard treatment and were maintaining abstinence. Each control was matched to the case with regard to the time to relapse. E.g., a case who relapsed after two months of abstinence was matched with a control who follows up at two months of abstinence. Hence a group of 30 patients constituted the control group. The instruments were administered at the deaddiction clinic after obtaining an informed consent.

INSTRUMENTS USED

1. 16 PF questionnaire - Form E (Catell, 1970).
2. Presumptive stressful life events scale (Gurmeet Singh,1984)
3. Proforma- Information regarding age, sex, education, occupation, religion, marital status, type of family, family history of alcohol dependence were obtained.

THE SIXTEEN PERSONALITY FACTOR QUESTIONAIRE (CATELL)

The sixteen personality factor questionnaire is an objectively scorable test devised by basic research to give the most complete coverage of personality in a brief time**.** Form E is designed for individuals with marked educational and / or reading deficits.

Personality is measured on 16 independent dimensions. Any item in the scale contributes to the score on one and only one factor so that no dependencies are introduced. Moreover the experimentally obtained correlations among the sixteen scales are generally quite small so that each scale provides new information about the person being tested. Each factor is given a raw score from 1 to 10. The raw scores are converted to a 'standard ten (Sten) score' distributed over ten equal interval standard score points (assuming normal distribution) from 1 through 10.The population average for a Sten distribution is fixed at 5.5 and the standard deviation is 2 Sten scores. One would normally consider Sten scores of 4 through 7 to be average, since they fall within one standard deviation of the population mean. Sten scores of 1, 2, 3 and 8, 9, 10 are generally considered to be of greater importance for profile interpretation since they are more extreme and occur far less frequently in a normal population.

The form E of the 16 PF was used for the study since it was noted that most of treatment seeking population in our hospital had only minimal formal education. The subjects were not very proficient in English and hence a Tamil translated version was given to the subjects.

THE PRIMARY TRAITS COVERED BY THE 16 PF TEST

Factor	Low Sten score description	High Sten score description
A	Cool, reserved, impersonal, detached, formal, aloof.	Warm, outgoing, kindly, easygoing, participating, likes people.
B	Concrete thinking, less intelligent	Abstract thinking, more intelligent, bright.
C	Affected by feelings, emotionally less stable, annoyed.	Emotionally stable, mature, faces reality.
E	Submissive, humble, mild, easily led, accommodating.	Dominant, assertive, aggressive, stubborn.
F	Sober, restrained, prudent, serious.	Enthusiastic, spontaneous, heedless, expressive, cheerful.
G	Expedient, disregards rules, self indulgent.	Conscientious, conforming, moralistic, rule-bound.
H	Shy, threat sensitive, timid.	Bold, venturesome, uninhibited.
I	Tough minded, self reliant, rough, realistic.	Tender minded, sensitive, over protected.
L	Trusting, accepting condition, easy to get on with.	Suspicious, hard to fool, distrustful, skeptical.
M	Practical, careful, steady, conventional.	Imaginative, absent minded, impractical.
N	Forthright, unpretentious, open, genuine, artless.	Shrewd, polished, socially aware, diplomatic.
O	Self assured, secure, feels free of guilt, untroubled, self satisfied.	Apprehensive, self blaming, guilt prone, insecure, worrying.
Q1	Conservative, respecting traditional ideas.	Experimenting, liberal, critical, open to change.
Q2	Group oriented, listens to others.	Self sufficient, resourceful, prefers own decisions.
Q3	Lax, careless of social rules.	Socially precise, compulsive.
Q4	Tranquil, composed, unfrustated.	Frustrated, overwrought, has high drive.

PRESUMPTIVE STRESSFUL LIFE EVENTS SCALE (PSLES)

Presumptive Stressful Life Events Scale developed by Gurmeet Singh et al has 51 items which is based on the consensus a priori method and can be adapted to assess the events in lifetime or within a short span of time (1-6 months). Singh developed this scale suitable for assessing stressful life events for Indian patients in 1981 by using open-ended questionnaire on a sample of 200 adult subjects.

It was based on social readjustment rating scale of Holmes and Rahe, who believed that some kind of a list of commonly encountered stressors would be more useful than the relatively unregulated process of taking an unstructured history. After considerable research, they developed a list of 51 life events relevant to Indian conditions, ranging in severity from death of a spouse to going on a pleasure trip/pilgrimage. Scale items are classified into desirable, undesirable, or ambiguous; and personal or impersonal. The process of administering the scale is that respondents are asked to go through the list events during the lifetime and in the past one year A cumulative score can be obtained by summing up the individual scores weighed depending upon the stress caused to the individual. The data can be analysed quantitatively a well as qualitatively. In this study data was analysed quantitatively.

Statistical Analysis

Data analysis was done using univariate technique. Two tailed test was applied for all analysis. Analysis was done using Epiinfo software with the help of statistician.

RESULTS AND OBSERVATIONS

TABLE I

COMPARISON OF MEAN AGE OF THE TWO GROUPS

SUBJECTS	N	MEAN	p VALUE
CASES	30	35.4	0.54
CONTROLS	30	36.6	

Table 1 shows the mean age of the two groups. It is evident that the mean age of the alcohol relapse patients is 35.4 and the mean age of the controls is 36.6. There is no significant statistical difference between the mean age of the two groups.

TABLE 2

COMPARISON OF EDUCATIONAL STATUS OF THE TWO GROUPS

EDUCATION	CASES (n%)	CONTROLS (n%)	p VALUE
PRIMARY	19 (63.3)	15(56.7)	0.25
SECONDARY	8 (26.6)	10(30)	
HIGHER SECONDARY	3 (10)	5(13.3)	

Table 2 and figure 1 describe the educational status of the two groups. Among the relapse patients, 63.3% had only primary education and 26.6% had secondary education. Among the controls 56.6% had only primary education and 30 % had secondary education. Only 10 % of cases and 13.3% of controls had higher secondary education. There is no significant statistical difference between the two groups in educational status.

TABLE 3

COMPARISON OF OCCUPATION OF THE TWO GROUPS

OCCUPATION	CASES (n%)	CONTROLS (n%)	P VALUE
UNSKILLED	18(60)	14 (46.7)	0.30
SKILLED	12 (40)	16 (53.3)	

Table 3 and figure 2 describe the occupation of the two groups. Among relapse patients, 60% were involved in unskilled manual work and 40% were employed in skilled work. Among abstinent patients, 46.7% were involved in unskilled manual work and 53.3% were employed in skilled work. From the p value it is evident that there is no significant statistical difference between the two groups in occupation.

TABLE 4

COMPARISON OF THE MARITAL STATUS OF THE TWO GROUPS

MARITAL STATUS	CASES n (%)	CONTROLS n (%)	p VALUE
MARRIED & LIVING TOGETHER	26 (86.7)	28 (93.3)	0.45
MARRIED & SEPERATED	2 (6.66)	1 (3.33)	
SINGLE	2(6.66)	1 (3.33)	
DIVORCE	NIL	NIL	

Table 4 and figure 3 describes the marital status of the two groups. 86.7% of the cases and 93.3% of the controls were living together with their spouses. 6.67% of the cases and 3.33% of the controls were living separated from their spouses. 6.67% of the cases and 3.33% of the controls were unmarried and there is no significant statistical difference in the marital status of the two groups.

TABLE 5

COMPARISON OF FAMILY TYPE OF THE TWO GROUPS

FAMILY TYPE	CASES n (%)	CONTROL n (%)	p VALUE
JOINT	3(10)	7 (23.3)	0.17
NUCLEAR	27((90)	23(76.7)	

Table 5 and figure 4 describe the family type of the two groups which show that 90% of cases and 76.7% of controls were living as a nuclear family. Only 10% of cases and 23.3% of controls were living as a joint family and there is no significant statistical difference in the family type between cases and controls.

TABLE 6

COMPARISON OF RELIGION OF THE TWO GROUPS

RELIGION	**CASES n (%)**	**CONTROLS n (%)**	**p VALUE**
HINDU	25 (83.3)	24 (80.0)	0.74
MUSLIM	2 (6.7)	4 (13.3)	
CHRISTIAN	3 (10)	2 (6.7)	

Table 6 and figure 5 describe the religion of the two groups. It is evident that most of the cases (83.3%) and controls (80%) belong to the Hindu religion. There is no significant statistical difference in the religion between cases and controls.

TABLE 7

COMPARISON OF FAMILY HISTORY OF ALCOHOL DEPENDENCE OF THE TWO GROUPS

FAMILY H/O	CASES n (%)	CONTROL n (%)	p VALUE
ABSENT	7(23.3)	16 (53.4)	P= 0.01
PRESENT	23(77.7)	14(46.6)	

Table 7 and figure 6 describe the family history of alcohol dependence of the two groups. 77.7% of the relapse patients and 46.6 % of the non relapsing patients have a family history of alcohol dependence. There is a significant statistical difference in the family history between cases and controls.

TABLE 8

MEAN STEN SCORE COMPARISON OF CASES AND CONTROLS PROFILES ON THE 16 PF QUESTIONAIRE

16 PF PROFILE	CASES	CONTROLS	P VALUE
A	4.03	3.88	0.44
B	4.03	3.90	0.48
C	3.83	3.53	0.41
E	**6.70**	**5.02**	**0.002**
F	4.40	4.21	0.32
G	**3.88**	**4.97**	**0.01**
H	**4.86**	**5.57**	**0.007**
I	4.96	5.06	0.69
L	**6.06**	**5.13**	**0.01**
M	4.60	4.38	0.16
N	4.13	3.90	0.47
O	4.66	4.36	0.19
Q1	5.70	5.56	0.57
Q2	5.60	5.36	0.38
Q3	**4.43**	**6.00**	**0.03**
Q4	**6.70**	**5.80**	**0.001**

Table 8 and figure 7 show the mean Sten scores of the two groups. Analysis of the mean scores indicate that the cases as a group, score lower than average on the factors H, G, Q3 when compared to controls. They also score significantly higher than average on factors E, Q4, and L when compared to controls. Both the groups score lower than average on factors A, B, C, F, M, N, and O.

TABLE 9

COMPARISON OF PROPORTION OF CASES AND CONTROLS ON LOW SCORES (1-3) ON THE 16 PF

16 PF PROFILE	CASES(n)	CONTROLS(n)	P VALUE
A	9	13	0.66
B	8	9	0.29
C	6	9	0.33
E	3	4	0.59
F	4	5	0.34
G	18	9	0.001
H	10	3	0.007
I	0	0	-
L	3	5	0.78
M	10	8	0.13
N	12	10	0.29
O	4	6	0.22
Q1	3	2	0.35
Q2	4	3	0.54
Q3	27	15	0.03
Q4	4	3	0.54

Table 9 and figure 8 shows the low scores (1-3) of the two groups. As shown in the above table when the low scoring proportions of the alcohol relapse patients are compared with those of non relapsing patients with chi-square test, from the p value it turns out that significantly more number of cases score low on factors G, H, and Q3.

TABLE 10

COMPARISON OF PROPORTION OF CASES AND CONTROLS ON HIGH SCORES (8-10) ON THE 16 PF

16 PF	CASES(n)	CONTROLS(n)	P VALUE
A	3	4	0.59
B	2	3	0.92
C	0	0	0.67
E	11	4	0.002
F	3	3	0.59
G	3	2	0.35
H	2	1	-
I	5	4	0.43
L	6	1	0.01
M	1	2	0.92
N	3	5	0.78
O	0	0	
Q1	5	4	0.33
Q2	3	2	0.35
Q3	2	4	0.22
Q4	11	3	0.001

Table 10 and figure 9 shows the high scores (8-10) of the two groups. As shown in the above table, when the high scoring proportions of the alcohol relapse patients are compared with those of non relapse patients with chi square test, from the p value it turns out that significantly more number of cases score high on factors E, L, and Q4.

TABLE 1I

COMPARISON OF CUMULATIVE MEAN STRESS SCORES (MSS) OF THE TWO GROUPS ON PSLES

	MEAN	STANDARD DEVIATION	t STATISTIC	p VALUE
CASES	234	24.08	6.96	0.001
CONTROLS	187	28.09		

Table 11 and figure 10 describe the mean cumulative stress scores of the two groups. From the table it is evident that the alcohol relapse patients as a group score higher than non relapsing patients in the mean stress score. By applying p value, it turns out that the difference is statistically significant.

TABLE 12

COMPARISON OF MEAN NUMBER OF STRESSFUL LIFE EVENTS OF THE TWO GROUPS ON PSLES

SUBJECTS	MEAN	STANDARD DEVIATION	t STATISTIC	p VALUE
CASES	4.3	0.71	4.24	0.0001
CONTROLS	3.6	0.55		

TABLE 12 shows the number of stressors experienced by the two groups. The relapse patients had more stressors (mean=4.3; SD= 0.71) than the non relapsing patients (mean=3.6; SD= 0.55) and the difference is statistically significant.

DISCUSSION

The study was done with two objectives. First, to find out whether personality traits of individuals who relapse to alcohol dependence differ from those who did not relapse. Second, to find out whether the number of stressful life events experienced differs between the two groups.

In the present study, alcohol relapse patients did not differ significantly from the non relapse patients in their socio demographic profiles. There was no statistically significant difference in terms of age, education, occupation, marital status, type of family and religion. However these findings are not concordant with that of Cronkite and Moos (1980) who point out that patients with a higher socio demographic status are more likely to possess less severe intake symptoms, are more likely to enter treatment, and are more likely to participate actively in treatment which may lead to a better outcome. Individuals from the lower socioeconomic levels are more likely to return to relapse.

In this study, when compared to patients who did not relapse to alcohol dependence, patients who relapsed to alcohol dependence, as a group, deviate significantly towards low scores on factors G, H, Q3 and towards high on factor E, L, Q4.

Patients who relapsed to alcohol dependence score low on factor G. They tend to be unsteady in purpose. They are often casual and lacking in effort for group undertakings and cultural demands. Their freedom from group influence may lead to antisocial acts, but at times make them more effective, while their refusal to bound by rules cause them to have less somatic upset from stress. The findings support that of Hathaway & Meehl et al. (1951) who had found alcohol relapse patients as possessing an emotionally unstable personality, aggressive tendencies, and low frustration tolerance.

Marlatt et al.(1978), concluded that frustration and anger over interpersonal difficulties precipitated relapse. Rounsaville et al.(1987), concluded that antisocial personality disorder as such appear to be a good predictor of early relapse. Sellman et al. (1997), found that when compared with those who did not relapse after 6 months of treatment, subjects who relapsed had lower TPQ persistence scale scores.

Patients who relapsed to alcohol dependence score low on factor H. They are timid, threat sensitive, hesitant and intimidated. They usually have inferior feelings and tend to be slow and impeded in speech and in expressing themselves. They dislike occupations with personal contacts, prefer one or two close friends to large groups, and are not given to keeping in contact with all that is going on around them. These findings are supported by the findings of Tarnai and Young et al.(1983), who found that being introverted generally predicts relapse and poor prognosis.

The findings are also supported by Janowsky et al. (1999) who found that patients are less likely to attend group therapy sessions on follow up when they score high on tridimensional personality questionnaire harm avoidance and on shyness with strangers subscale.

Patients who relapsed to alcohol dependence score low on factor Q3. They are lax, careless of social rules. They are not bothered with will control and have little regard for social demands. They are impetuous and not overly considerate, careful or painstaking. They may feel maladjusted. The finding is supported by Neeliyara et al. (1985) and McGue et al. (1997), who had stated that alcohol relapse patients scored significantly higher on all indicators of negative emotionality and consistently lower on indicators of constraints. The findings also corroborate with that of Schuckit et al. (2009), who has confirmed the influence of traits related to impulsivity and sensation seeking, in alcohol relapse.

Patients who relapsed to alcohol dependence score high on factor E. They are dominant, aggressive, stubborn, competitive and bossy. They tend to be austere, a law unto themselves, hostile or extrapunitive, authoritarian and disregarding of authority. These findings are consistent with that of Christina et al. (2009), who states that individuals with antisocial personality disorder (ASPD) were found to be twice as likely to relapse in response to life stressors compared to individuals.

Patients who relapsed to alcohol dependence score high on factor L. They tend to be mistrusting and doubtful. They are often involved in their own egos and are self opinated and interested in internal, mental life. Usually they are deliberate in their actions, unconcerned about other people and poor team members. These findings are supported by that of Kiran et al. (1984), who state that patients who drop out of treatment appeared to be less symptomatic, more skeptical and tolerant of inconvenience and change as compared to those who completed treatment.

Patients who relapsed to alcohol dependence score high on factor Q4 which stand for ergic tension. They are tense, frustrated, overwrought, restless and hard driving. They are often fatigued, but unable to remain inactive, extremely high tension level may disrupt work performance. These findings corroborate with that of Miller et al. (1977), who states that alcoholics often demonstrate deficits in the area of assertiveness, the ability to cope with negative emotions and expression of anger or resentment and that of Scheier et al. (1997), who state that personality traits particularly related to neuroticism variably appear as direct predictors of the development of relapse in adolescents. Fisher et al. (1998), in a study on alcohol dependent individuals showed that in survival analysis, neuroticism and conscientiousness from the NEO-Personality Inventory were significant predictors of relapse.

In addition, both the relapse patients and non relapse patients score lower than average on factors A,B,C,F, M,N, and O but they did not attain any statistical significance. It might be interpreted that both the cases and controls may share these personality traits in common.

The second objective was to investigate the role of stressful life events in the two groups. It turned out that when compared to controls, relapse patients had higher mean stress score and more number of stressful life events in the past one year, which was statistically significant. Most of the events were undesirable events related to financial loss, family conflict, marital conflict, damage to property and trouble at work with superiors, colleagues and subordinates

The findings are corroborated by Maisto et al & O'Farrell, et al. (1988) who found that 67.5% of relapse was preceded by negative events and a majority of these episodes (64%) were reported to involve the alcoholic's spouse. Interpersonal conflict appears to be a prognostic sign for relapse. In a study by Cummings, Gordon, and Marlatt (1980), almost half of the relapse episodes occurred in relation to interpersonal conflict.

The findings were supported by Nordstrum and Berglund. (1986), who did a two decade follow-up of alcoholics to determine what factors contributed to relapse. The most frequently reported factors included legal complications,

financial trouble, establishing a relationship with a new partner, social pressure from partner, and change to a new job.

The findings were also supported by Susan et al. (2006), who found that severe chronic stressors and substance availability predicted an increased risk of initiating substance use post treatment. It was also found that in contrast to chronic stressors, recent stressful life events were not predictive of post-treatment substance initiation or severity.

The findings were not supported by Hore et al. (1971), who explored the relationship between life events and alcohol relapse. He was unable to establish a relationship between negative life events and alcohol relapse.

Another important finding in this study is that subjects had a family history of alcohol dependence in 76.7 % of cases and in 46.6% of controls. It was statistically significant. Even though no structured interview was done to elicit information about family history of alcohol dependence, the interview was one to one and cross checked with the relatives wherever possible. The finding suggests that patients with family history of alcohol dependence were more prone for relapse.

SUMMARY

This study is a case control study in which the personality profiles and the stressful life events of alcohol relapse patients were assessed using 16 PF personality questionnaire and presumptive stressful life events scale respectively and were compared with matched controls. Each control was matched with the case for the time to relapse.

Alcohol relapse patients differ from controls in 16 PF in exhibiting the following trait deviations 1. weaker superego strength 2. protension 3. dominance 4. low self integration 5. high ergic tension and 6. thractia (shy, restrained, timid). It translates into the following deviations in the present literature. They are dominant, venture some, expedient, suspicious, uncontrolled and tense.

Alcohol relapse patients had more rates of family history of alcohol dependence when compare to that of controls.

Alcohol relapse patients had more number of stressful life events in the past one year when compared to that of controls. The difference was statistically significant.

Alcohol relapse patients had higher mean stress score when compared to that of controls. The difference was statistically significant. There was no difference in the socio demographic profile between the two groups.

CONCLUSION

The personality trait deviations of the alcohol relapse patients turned out to be significant as compared to abstinent individuals both on mean scores and on proportions. This finding indicate some degree of association between these traits and alcohol relapse and a possible eitiological significance also.

These findings may have significance on the interventional strategies against alcohol relapse. For example in planning interventional strategies, those with low superego strength and low frustration tolerance may benefit from coping skills programme. This may help in conserving and effectively utilizing the resources available.

The relapse patients as a group score significantly high on mean stress scores and number of stressors as compared to controls. This finding implicates that the relapse patients perceive more life stressors which might have a causal relationship to relapse.

It helps to predict at risk group for relapse and hence to plan effective strategies for early identification and treatment of relapsing individuals.

LIMITATIONS

The study was done only with male patients. The female population could not be included because of the scarcity of the samples.

The study was conducted in a tertiary care hospital and hence it may not be representative of the population.

Since this is not a prospective study it is difficult to discern whether the observed variations in personality traits are the cause or result.

Abstinence in control groups was assessed only from the history given by the controls and relatives. No objective measure was used.

The confounding interaction between personality and stressful life events was not dealt with in this study.

The causal effect of stressful life events on relapse was not assessed in this study. The assessment of number and type of stressors was done in this study rather than the assessment of perception and cognitive appraisal of events.

FUTURE DIRECTIONS

Further studies with large samples drawn randomly from the community and representing all the socioeconomic data including both the sexes are required to validate or disapprove the above findings. More longitudinal studies are required to delineate the effects of personality trait deviations and stressful life events on relapse. The need for studying the association between personality trait deviations and perception of stressors is also compelling for its application in clinical practice.

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FIGURE - 7

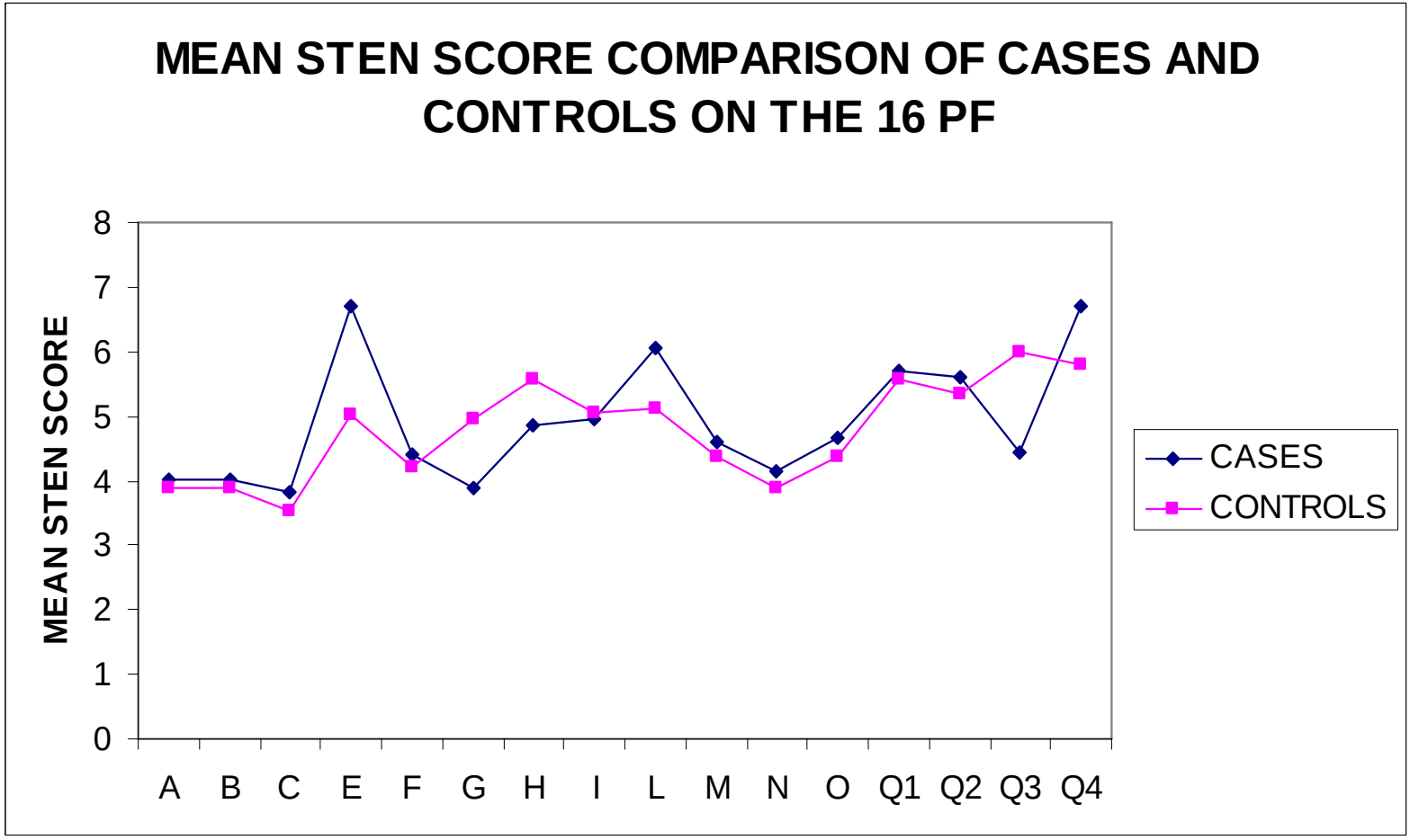

MEAN STEN SCORE COMPARISON OF CASES AND CONTROLS ON THE 16 PF
MEAN STEN SCORE
0
1
2
3
4
5
6
7
8
A
B
C
E
F
G
H
I
L
M
N
O
Q1
Q2
Q3
Q4
CASES
CONTROLS

FIGURE - 8

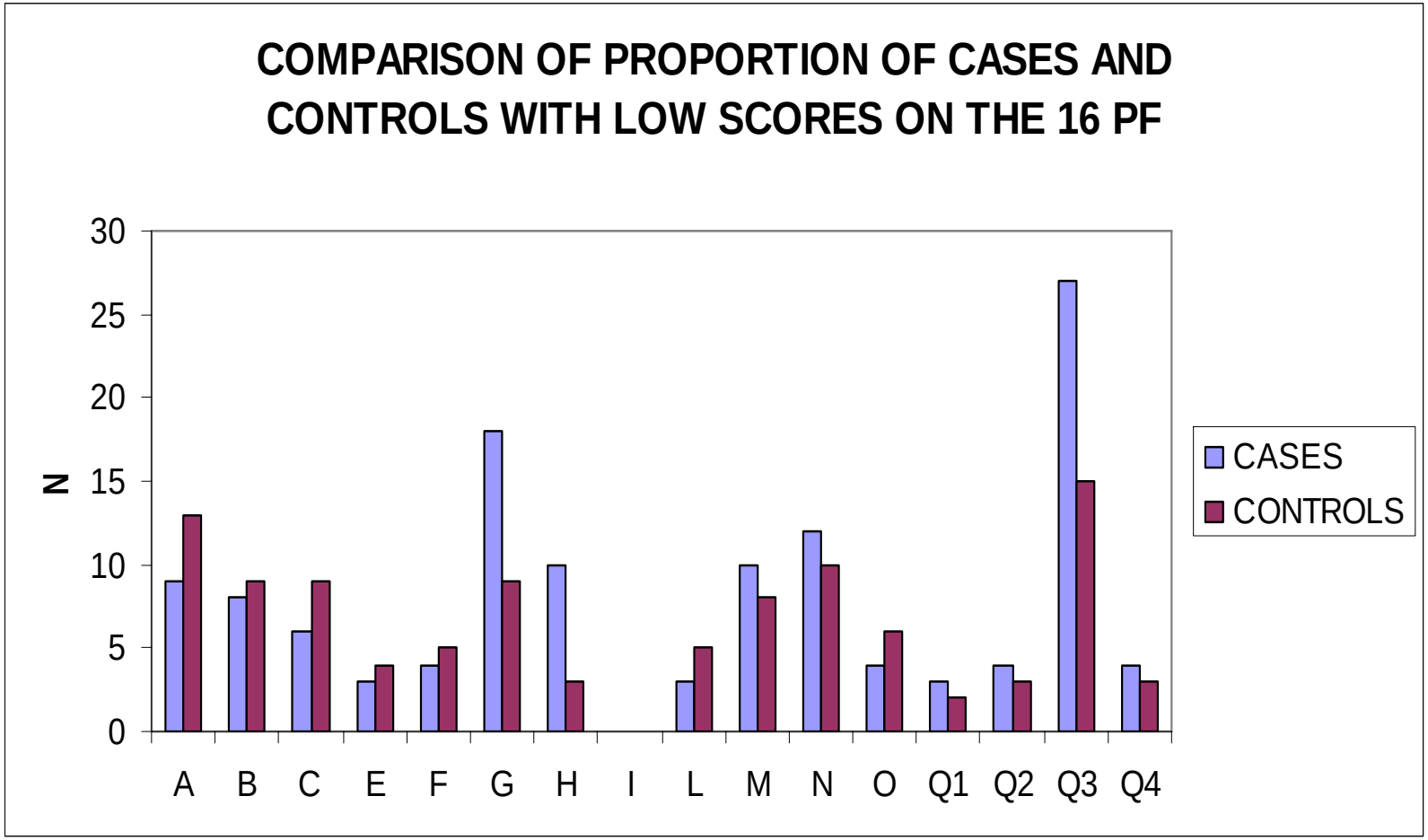

COMPARISON OF PROPORTION OF CASES AND CONTROLS WITH LOW SCORES ON THE 16 PF
N
30
25
20
15
10
5
0
A
B
C
E
F
G
H
I
L
M
N
O
Q1
Q2
Q3
Q4
CASES
CONTROLS

FIGURE - 9

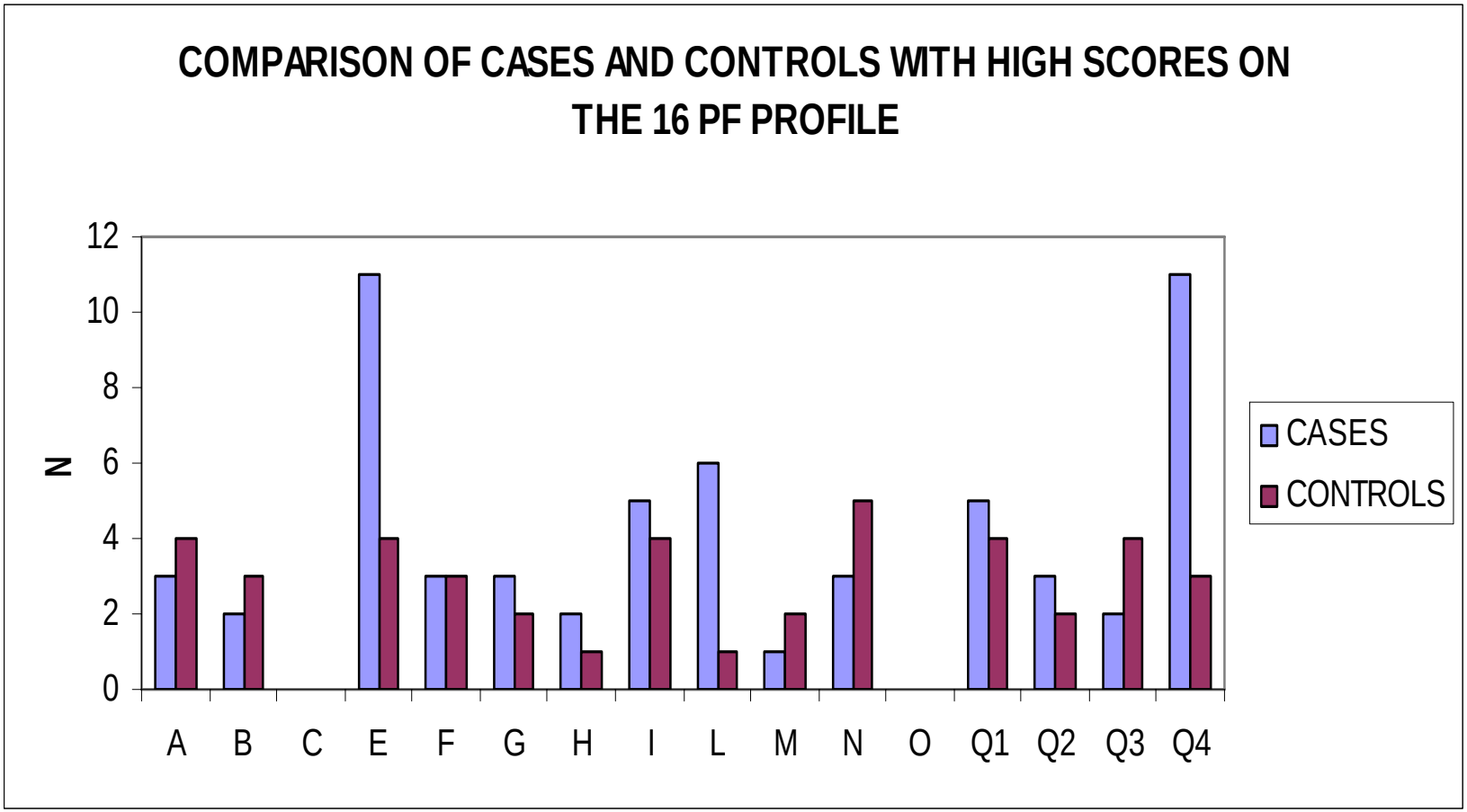

COMPARISON OF CASES AND CONTROLS WITH HIGH SCORES ON THE 16 PF PROFILE
N
12
10
8
6
4
2
0
A
B
C
E
F
G
H
I
L
M
N
O
Q1
Q2
Q3
Q4
CASES
CONTROLS

FIGURE - 10

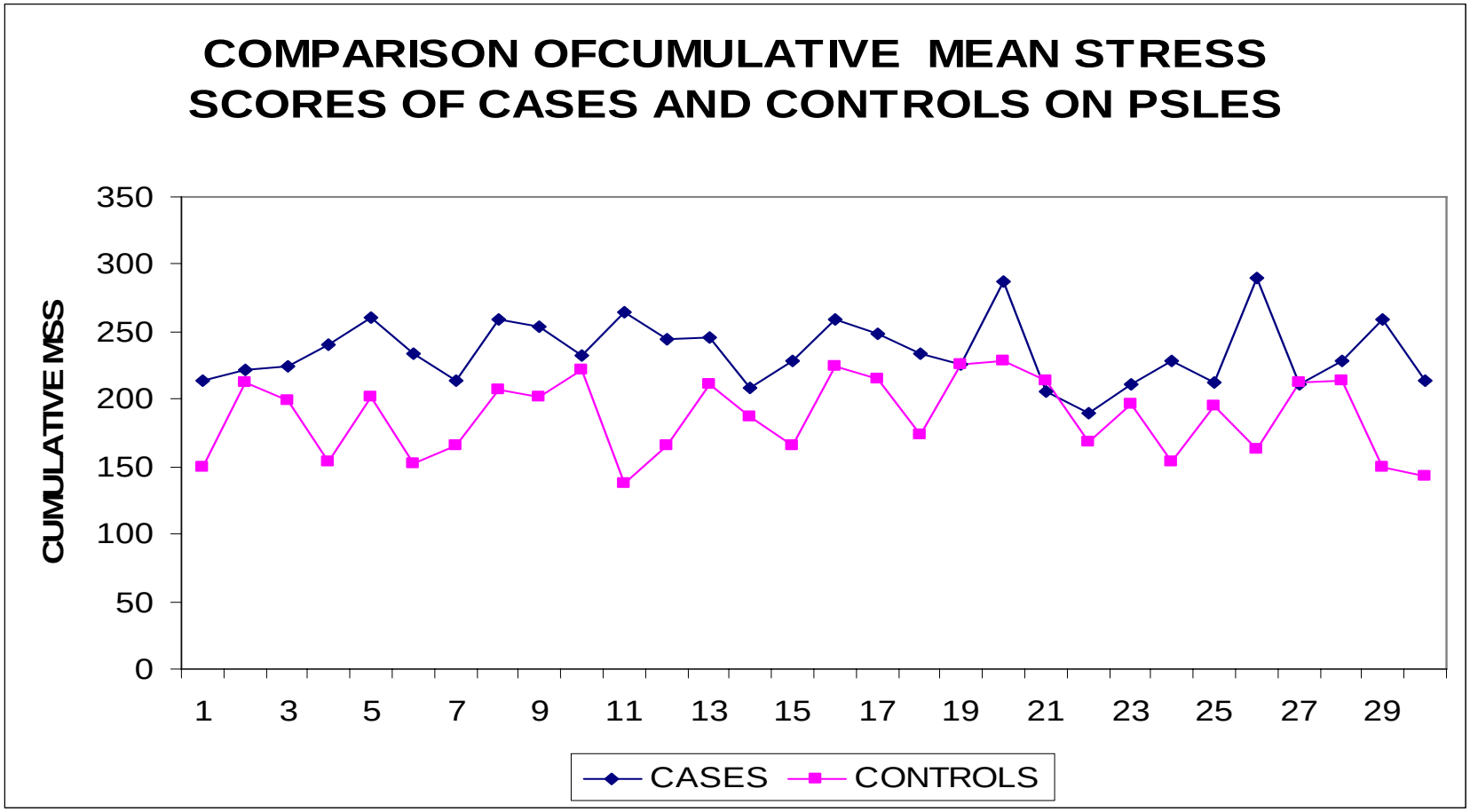

COMPARISON OFCUMULATIVE MEAN STRESS SCORES OF CASES AND CONTROLS ON PSLES
CUMULATIVE MSS
350
300
250
200
150
100
50
0
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
CASES
CONTROLS

FIGURE - 1

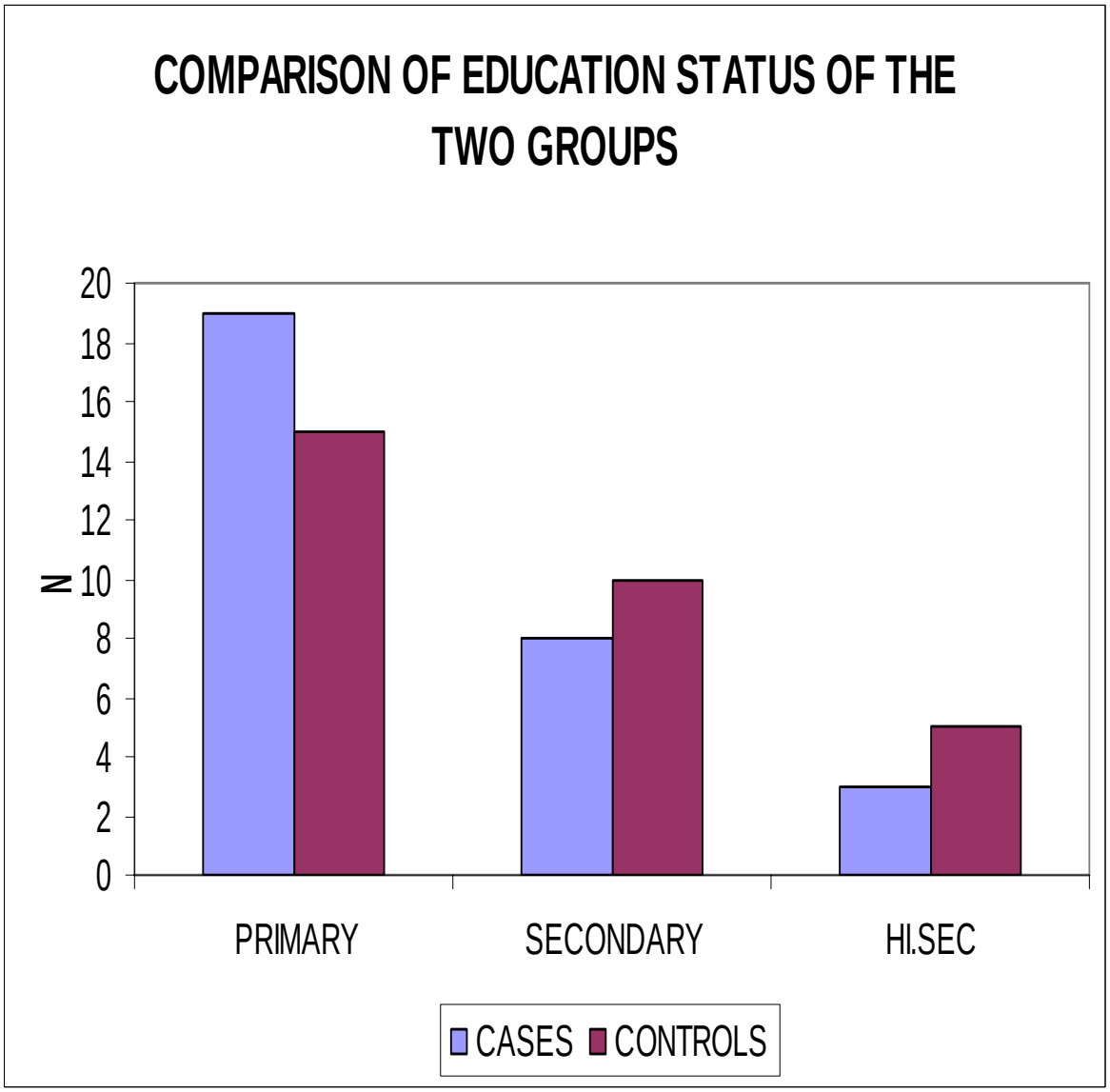
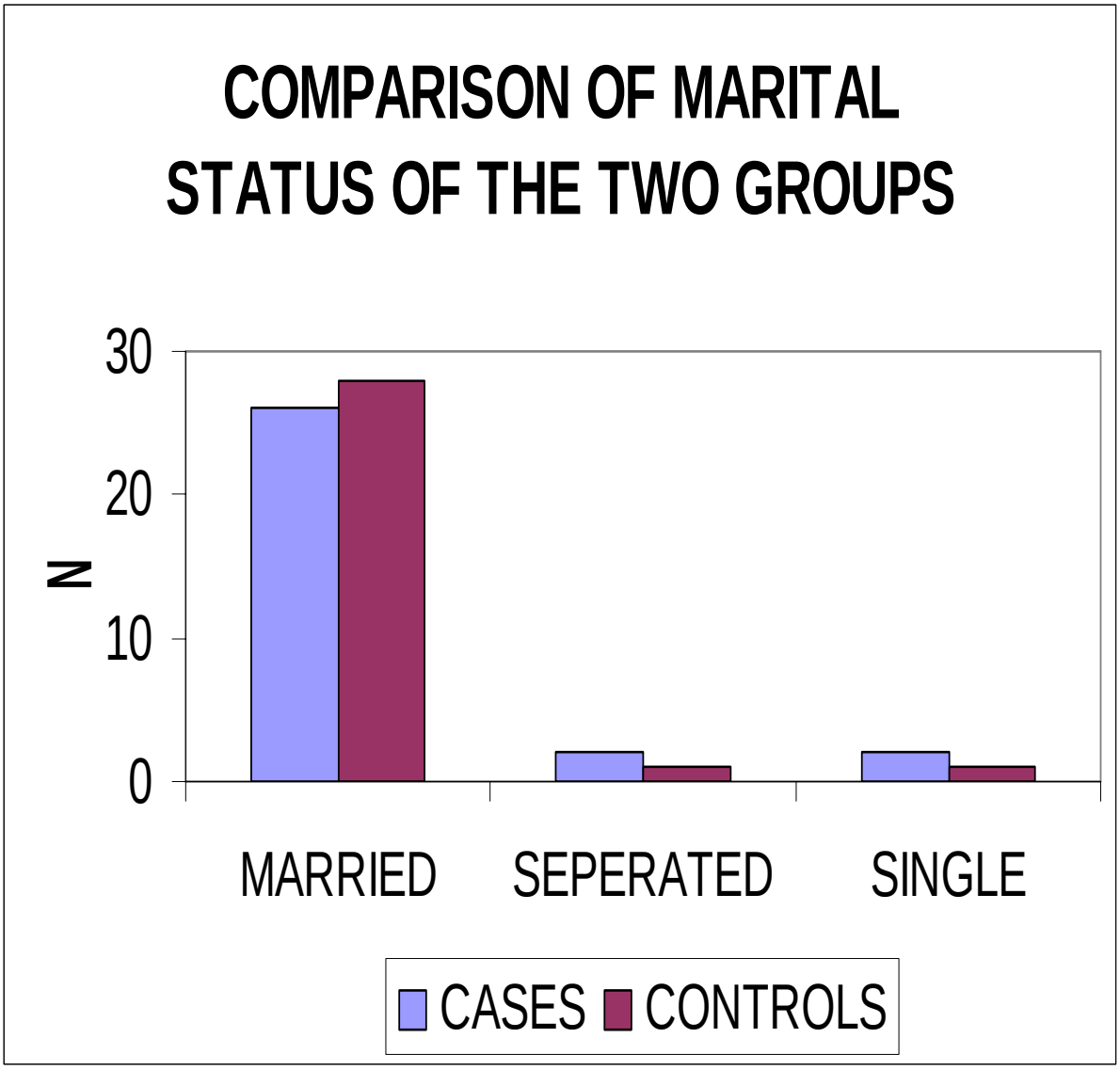

COMPARISON OF EDUCATION STATUS OF THE TWO GROUPS
20
18
16
14
12
10
8
6
4
2
0
N
PRIMARY
SECONDARY
HI.SEC
CASES
CONTROLS

FIGURE - 3


COMPARISON OF MARITAL STATUS OF THE TWO GROUPS
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20
10
0
N
MARRIED
SEPERATED
SINGLE
CASES
CONTROLS

FIGURE - 2

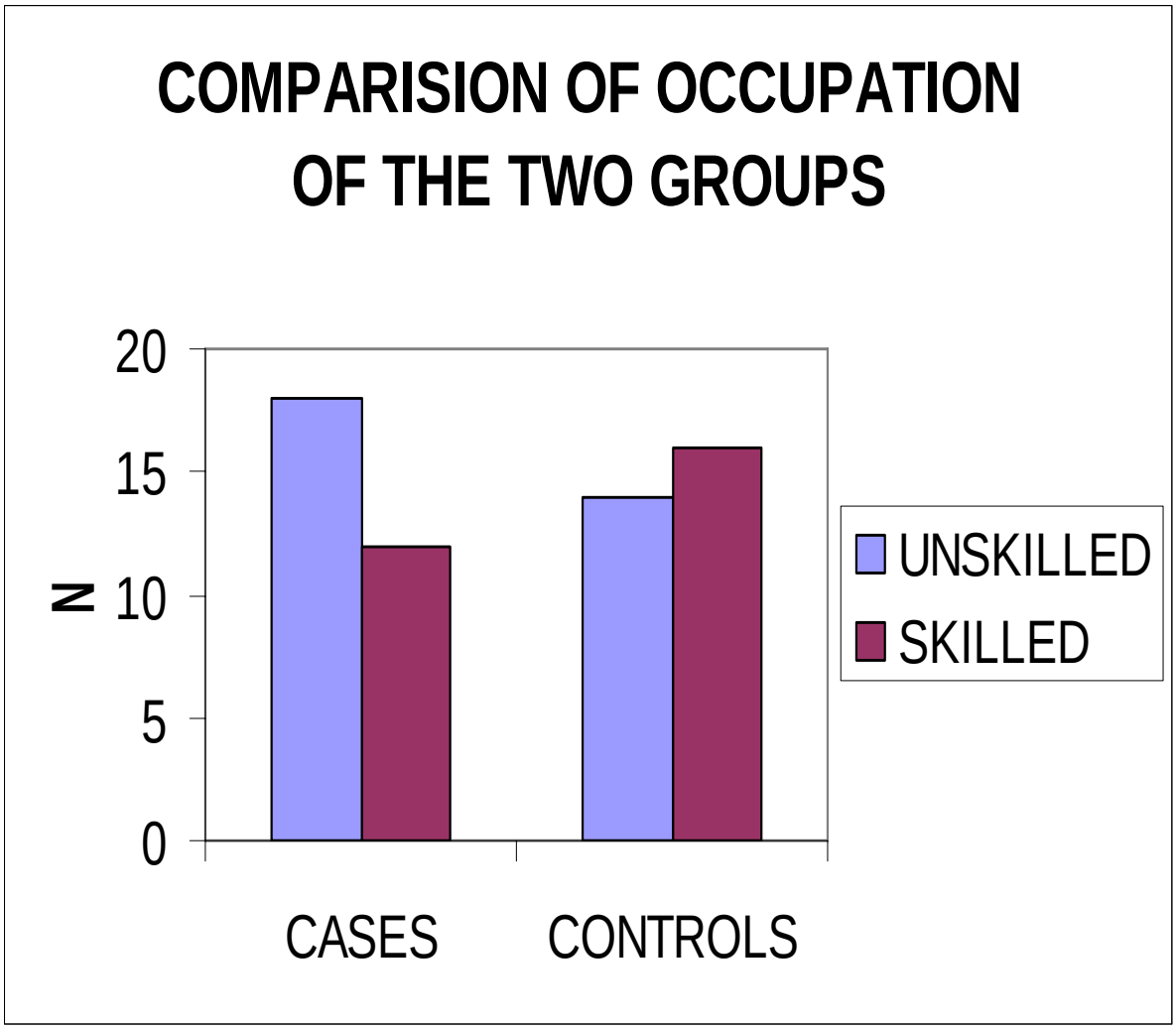

COMPARISION OF OCCUPATION OF THE TWO GROUPS
20
15
10
5
0
N
CASES
CONTROLS
UNSKILLED
SKILLED

FIGURE - 4

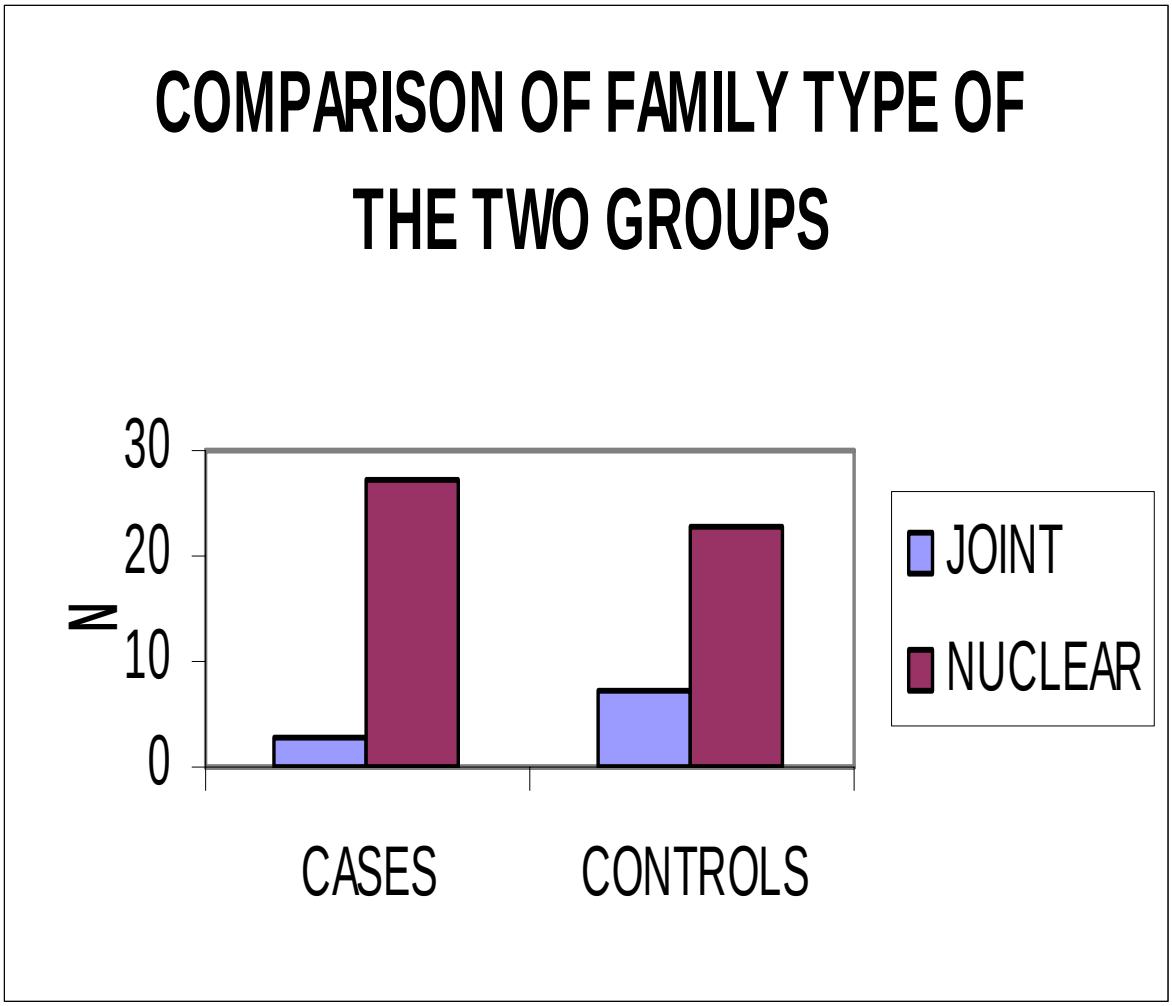

COMPARISON OF FAMILY TYPE OF THE TWO GROUPS
30
20
10
0
N
CASES
CONTROLS
JOINT
NUCLEAR

FIGURE - 5

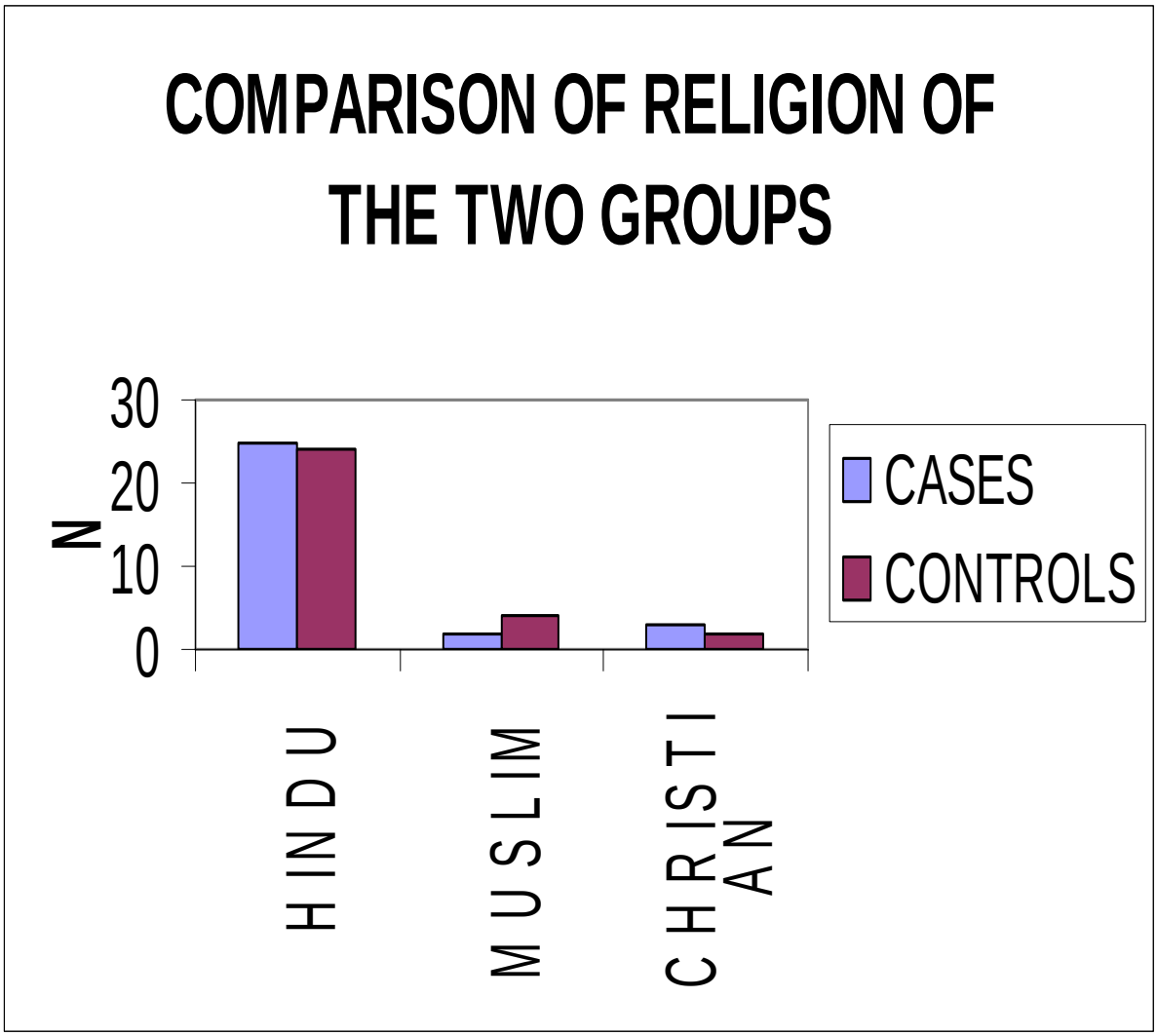
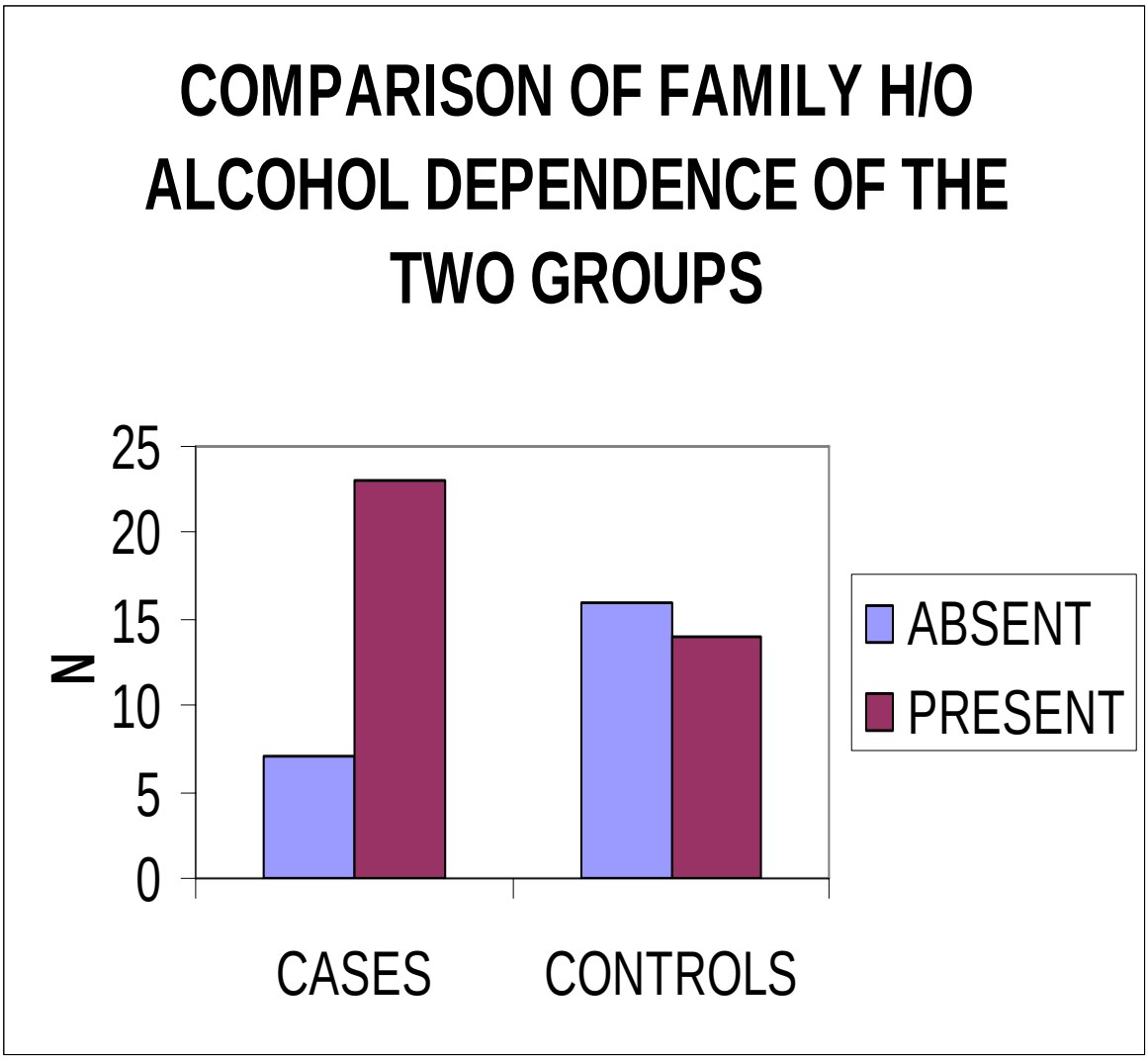

COMPARISON OF RELIGION OF THE TWO GROUPS
N
30
20
10
0
HINDU
MUSLIM
CHRISTIAN
CASES
CONTROLS

FIGURE - 6


COMPARISON OF FAMILY H/O ALCOHOL DEPENDENCE OF THE TWO GROUPS
N
25
20
15
10
5
0
CASES
CONTROLS
ABSENT
PRESENT